IN THE CLAIMS

Listing of Claims:

1   1. (original) A method for ensuring a secure programming environment for a computer

2   system comprising the steps:

3   modifying a processor of said computer system to incorporate an S-latch, a first

4   state of said S-latch setting said processor in a secure state and a second state of said

5   S-latch setting said processor in a non-secure state;

6   writing a security code in an NVRAM coupled to said computer system;

7   reading said security code from said NVRAM;

8   setting said first and second state of said S-latch in response to states of said

9   security code; and

10   not accepting processor commands from an In Circuit Emulator (ICE) unit

11   coupled to said computer system when said S-latch is in said first state and accepting

12   processor commands from said ICE unit when said S-latch is in said second state.

1   2. (original) The method of claim 1, wherein said security code is read by boot block

2   code within a Basic Input Output System (BIOS) code of said computer system.

1   3. (original) The method of claim 2, wherein said S-latch is set by said boot block code

2   in response to reading said security code.

1   4. (original) The method of claim 2, wherein said boot block code is a first code

2   executed on each power up or system reset of said computer system.

1   5. (currently amended) The method of claim 1, wherein said security code is encrypted

2   when written into said NVRAM [[unit]].

1   6. (currently amended) The method of claim 1, wherein said security code is password

2   protected when written into said NVRAM [[unit]].

1   7. (original) The method of claim 2, wherein said BIOS code is executed if said boot

2   block code is able to authenticate said security code and said boot block code is able to

3   write to said S-latch if said security code corresponds to setting said first state of said

4   S-latch.

1   8. (original) The method of claim 2, wherein said BIOS code is not executed if said boot

2   block code is not able to authenticate said security code.

1   9. (original) The method of claim 2, wherein said BIOS code is not executed if said boot

2   block code is able to authenticate said security code and said boot block code is not able

3   to set a state of said S-latch.

1   10. (original) The method of claim 1, wherein said ICE unit is coupled to said computer

2   system on a system bus of said computer system.

1   11. (original) The method of claim 1, wherein said ICE unit is coupled to said computer

2   system on a JTAG scan chain bus.

1   12. (original) The method of claim 1, wherein said ICE unit is coupled to said computer

2   system in place of said modified processor.

1   13. (original) The method of claim 1, wherein a default said S-latch in said computer

2   system is set to a non-secure state.

1   14. (currently amended) A computer system comprising:

2   a central processing unit (CPU);

3   a random access memory (RAM);

4   non-volatile RAM (NVRAM);

5   a communications adapter coupled to a communication network;

6   an I/O adapter;

7   a bus system coupling said CPU to said NVRAM, said communications adapter,

8   said I/O adapter, and said RAM, wherein said CPU further comprises:

9   a modified processor with an S-latch, a first state of said S-latch setting said

10   modified processor in a secure state and a second state of said S-latch setting said

11   modified processor in a non-secure state;

12   <u>first</u> circuitry operable to receive and write a security code in said NVRAM;

13   <u>second</u> circuitry operable to read said security code from said NVRAM; ~~and~~

14   ~~circuitry~~ <u>and</u> operable to set said first and second state of said S-latch in response

15   to states of said security code;

16   wherein said modified processor accepts commands from an In Circuit Emulator

17   (ICE) unit coupled to said computer system when said S-latch is in said second state and

18   does not accept processor commands from said ICE unit when said S-latch is in said first

19   state.

1   15. (original) The computer system of claim 14, wherein said security code is read by

2   boot block circuitry within Basic Input Output System (BIOS) circuitry of said computer

3   system.

1   16. (original) The computer system of claim 15, wherein said S-latch is set by said boot

2   block circuitry in response to reading said security code.

1   17. (original) The computer system of claim 15, wherein said boot block circuitry reads

2   said security code as a first operation on each power up or system reset of said computer

3   system.

1   18. (currently amended) The computer system of claim 14, wherein said security code is

2   encrypted when written into said NVRAM [[unit]].

1   19. (currently amended) The computer system of claim 14, wherein said security code is

2   pass word protected when written into said NVRAM [[unit]].

1   20. (original) The computer system of claim 15, wherein said BIOS circuitry is enabled

2   if said boot block code is able to authenticate said security code and said boot block code

3   is able to write to said S-latch if said security code corresponds to setting said first state

4   of said S-latch.

1   21. (original) The computer system of claim 15, wherein said BIOS circuitry is disabled

2   if said boot block is not able to authenticate said security code.

1   22. (original) The computer system of claim 15, wherein said BIOS circuitry is disabled

2   if said boot block circuitry is not able to set said S-latch into a state.

1   23. (original) The computer system of claim 14, wherein said ICE unit is coupled to said

2   computer system on a system bus of said computer system.

1   24. (original) The computer system of claim 14, wherein said ICE unit is coupled to said

2   computer system on a JTAG scan chain bus.

1   25. (original) The computer system of claim 14, wherein said ICE unit is coupled to said

2   computer system in place of said modified processor.

1   26. (original) The computer system of claim 14, wherein a default said S-latch in said

2   computer system is set to a non-secure state.